

a) amplifying chromosomal DNA with oligonucleotide primer pairs specifically hybridizing to said locus of a region of said chromosomal DNA, wherein said region of the DNA comprises a repeated dinucleotide motif comprising at least one of the following selected from the group consisting of (GA:CT)<sub>n</sub>, (GT:CA)<sub>n</sub>, (AT:TA)<sub>n</sub>, where  $n \geq 10$ , to obtain an amplification product,

*GI  
Concl*  
b) size fractionating the amplification product to provide a measure of the said motif of the chromosomal DNA between said primer pairs,

wherein the size of the amplification product is polymorphic for said locus and provides a genotype for said plants.

15. (amended) The method of claim 14, wherein the primer pairs are selected from at least one of the pairs SEQ ID NO. x and SEQ ID NO. x+1, where  $x = 27, 93, 129, 203, 277, 315, 345, 361, 383$ .

16. (amended) The method of claim 14, wherein  $x = 1$ .

---